SARS IN TORONTO: A LOCAL PUBLIC HEALTH PERSPECTIVE

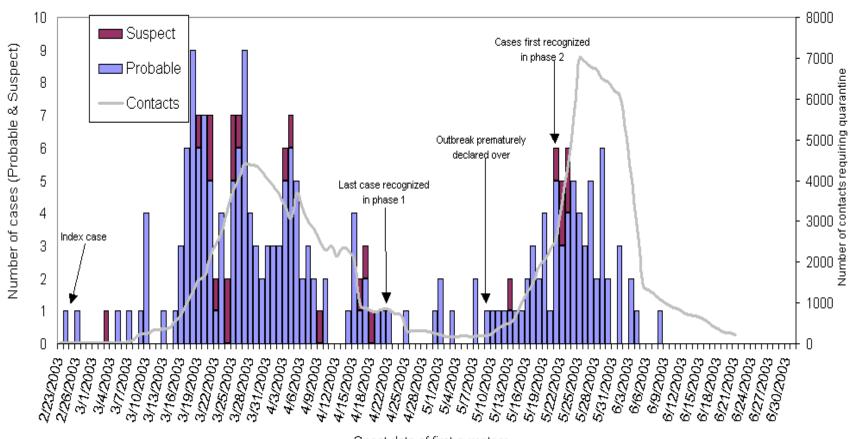
Presentation to
Secretary's Council on Public Health Preparedness
September 22, 2003
Arlington, Virginia

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Figure 1: Toronto SARS Cases* Contacts Requiring Quarantine†



Onset date of first symptom

What was the role of TPH?

- Disease surveillance and reporting
- Investigation and management of possible cases
- Identification and quarantine of close contacts
- Health risk assessment and communication
- Liaison with hospitals and other agencies re infection control
- Managing community relations

Incident Command Structure



Workload Volumes for Phase 1 & 2

- Over 300,000 calls to hotline March 15-June 24, 2003;
 47,567 calls on one day
- Approx. 2,000 case investigations (average 9 hrs/investigation)
- 198 Probable Cases and 26 Suspect Cases
- 23,306 contacts followed up; up to 6,995 people quarantined at any time

Disease Surveillance & Reporting

- SARS designated reportable, communicable and virulent under provincial legislation
- Case information received from
 - Physician reporting line
 - General TPH Hotline
 - Hospital liaison line
 - Contact follow-up team
 - Hospital liaison/category 3 response teams
 - Hospital/cluster investigation teams
 - Labs

Disease Surveillance & Reporting (Cont'd)

- Provincial database for reportable diseases could not be adapted for SARS
- Lacked a central database/data-sharing agreements between local, provincial and federal governments
- Due to volume depended on paper-based system until able to develop own SARS information system
- Case definition issues

Case Investigation

- Case investigation of all PUI, suspect and probable cases
- Detailed history taking
 - history while symptomatic
 - 10 day history prior to onset of symptoms
- Identification of all contacts establish level of contact
- Quarantine close contacts

Contact Follow-up

- Quarantine
 - not used > 50 years in Canada
 - "invented" work quarantine
- Used combination of
 - quarantine/work quarantine with daily or twice daily assessment by telephone
 - active surveillance with daily assessment
 - self-monitoring with periodic follow-up
 - day 10 follow-up and counselling

Contact Follow-up (Cont'd)

- Linkage of symptomatic contacts to special SARS Assessment Centres
- "Voluntary" quarantine issues
- Issued 27 Section 22 orders under HPPA
- Very difficult mentally, physically, emotionally and financially

Contact Follow-up (Cont'd)

- Provided resources & psychosocial support to individuals/ communities who were quarantined
 - One-on-one & group support by telephone
 - Partnerships
 - Homeless/shelter population
 - Jails/schools/workplaces/transit
 - Challenges of determining if someone is at home
 - Government financial support

Contact Follow-up (Cont'd)

- Community Issues
 - Post-quarantine acceptance back into schools and workplaces
 - Stigmatization of affected groups e.g. Chinese community
 - Acknowledge and deal with discrimination worked with community leaders
 - Address anxiety or fear
- Legal Issues/Challenges
 - Designate communicable and virulent
 - Group orders
 - Able to detain at facility other than hospital

Information/Communications

- Intense media interest, 2nd only to Iraq War
- Daily media briefings, televised live
- Over 1,200 media calls in the first 8 weeks
- Daily print/electronic, local/ethnic, international
- Multiple spokespersons, many opinions....

Information/Communications (Cont'd)

Multiple Stakeholders:

- Internal to TPH (among SARS teams, DMT, rest of public health unit)
- City government (eg. Legal, transit, first responders, senior administration/politicians)
- City unions, joint health and safety committees
- Health care and other community agencies/workers (eg. funeral homes, hospitals, physicians)
- Schools/school boards, jails, shelters
- Other local public health units, Ontario Ministry and Federal & WHO, other
- Churches, religious leaders, ethnoracial groups
- Conference planners and associations
- Workplaces
- General Public

Information/Communications (Contd)

Multiple Methods:

- Media
- Fact sheets for different audiences
- Quarantine directives for affected groups
- Print/web material translated into 4 languages
- Diverse language skills among Hotline staff plus AT&T translation service
- Train-the-trainer sessions for community agencies
- Outreach through local community meetings (health risks, ethnoracial discrimination)
- Standard letters to conference planners
- Shared internal hard drive for common protocols

Infection Control

- Pre-SARS staff participated on hospital infection control committees, provided advice on infection control
- During SARS:
 - hospital liaison/Category 3 response team on-site
 - participated in development of provincial directives
 - liaised with hospitals, CCAC's and other agencies on infection control (e.g. help interpret provincial directives)
 - participated in audit of Category 3 hospitals requesting downgrade of category
- Currently hospitals doing active surveillance for febrilerespiratory illness (FRI) (as of June 16/03)
 - FRI surveillance system being finalized
 - Increased TPH on-site surveillance

Lessons re: Disease Surveillance & Reporting

- Need a flexible, robust IT system to handle major outbreaks
- Active surveillance for febrile-respiratory illness, different mindset
- Need mechanisms for rapid reporting of disease activity across and within jurisdictions

Lessons re: Communications

- Communication & dissemination of accurate timely information is critical
 - health risk communication (general, specific groups)
 - ongoing relationship/partnership helpful
 - be clear re information needed by different levels of government
 - press conferences helpful minimize number of spokespersons
- Nursing skill set essential for hotline many medical issues, counselling, etc.
- Ensure information is accessible, linguistically & culturally appropriate
 - fact sheets and other information in 14 languages and others as needed
 - staff with language skills and used AT & T
 - special information sessions on-site

Other Key Lessons Learned

- Surge capacity/infrastructure
- Psychosocial
- Constantly changing environment and information
- Occupational health and safety issues
- Need a strong public health body at provincial level that has flexibility to respond to outbreaks; clear roles and responsibilities of different levels of government
- Need for improved cross-jurisdictional coordination
- Need for local public health units involvement in investigation/ research
- Ongoing need to debrief, evaluate at different levels